PA - 2670

AUTHOR VOYTOVETSKIY V.K., LEVIN B.A., MARCHENKO E.V.

TITLE Soft 15-800 keV Radiation Accompanying U^{235} Fission Induced by Thermal Neutrons. (Myakhkoye γ-izlucheniye v oblasti energiy ot 15 do 800 keV, soprovozhdayushcheye deleniy U^{235} teplovymi neytronami.- Russian)

PERIODICAL Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 32, Nr 2, pp 263 - 267 (USSR).

Received: 5/1957 Reviewed: 6/1957

ABSTRACT Experimental order: In a current of thermal neutrons an ionization chamber with U^{235} was fitted which registered fission fragments. For the purpose of analyzing the amplitudes, the amplitudes of a scintillation counter which coincide with the fission fragments resulting from fission fragments are selected by means of a coincidence scheme and a "gaal". The experimental order is discussed by on the basis of a graph. Measuring Results are well reproducible on the occasion of repeated measurements. $\sim 5,10^2$ acts of fissioning per sec were registered. A diagram illustrates the amplitude distribution of the momenta of these γ-rays which as regards time are verrelated with the fragments within the energy interval 15 - 400 keV. Statistical accuracy of measurements amounts to 0,5 - 1,5 %. The photopeaks correspond to the energies 27, 60, 101, 119, 142, 207, 295 and 360 keV. Measurements carried

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Soft 15-800 keV Radiation Accompanying U^{235} Fission Induced by Thermal Neutrons.

out with a lead layer of 5 mm thickness between chamber and crystal permit the evaluation of the influence exercised by non-elastic scattering. In the spectrum obtained by means of the layer of lead the lines 27, 101, 119, 142, 295 keV are lacking and the line 360 keV is considerably weakened. The line 60 keV was fully conserved and a weak radiation of 207 still exists. The lines 27, 101, 119, 142, 207, 295 and 360 keV are presumely caused by the γ-radiation occurring on the occasion of fissen but the line 60 keV and a negligibly small part of the radiation with 207 keV are caused by the nonelastic scattering of fission neutrons by the iodine contained in the crystal.
For some lines of the radiation occurring on the occasion of fission the values of energy and intensity are given in a graph. Apparently, the soft radiation is emitted by excited fragments after emission of the neutrons.
(6 illustrations and 1 table)

ASSOCIATION Institute of Atomic Energy of the Academy of Science of the USSR.

PRESENTED By: -

SUBMITTED: 24. 9. 1956.

AVAILABLE: Library of Congress.

CARD 2/2

VOYTOVICH, Ye.A.

Effectiveness of the production of paper with polyethylin coating for packaging of milk. Bum. i der. prom. no.4:16-19 O-D '64 (MIRA 18:2)

SOURCE CODE: GE/0030/66/013/002/0351/0358

AUTHOR: Manzheliy, V. G.; Tolkachev, A. M.; Voytovich, Ye. I.

ORG: Institute of Low-temperature Physics and Technology AN UkrSSR, Kharkov (Fiziko-tekhnicheskiy institut nizkikh temperatur)

TITLE: Thermal expansion of crystalline nitrogen, oxygen, and methane

SOURCE: Physica status solidi, v. 13, no. 2, 1966, 351-358

TOPIC TAGS: nitrogen, oxygen, methane, crystal, thermal expansion

ABSTRACT: The experimental data obtained on the physical properties of crystals with simple molecular structure cannot often be properly interpreted because of the lack of data on thermal expansion of the crystals. The thermal expansion data are also important for verifying many conclusions based on the dynamic theory of a lattice. This paper deals with the linear coefficients of thermal expansion of crystallized solid nitrogen, oxygen, and methane for which the linear coefficients were measurei in the temperature range 21 to 45K, 21 to 45K, and 21 to 60K, respectively. As in the first-order phase transformation temperatures are approached from the low-temperature phase side, the linear expansion coefficients exhibit an anomalously rapid increase. A possible explanation of these anomalies based on the idea of lattice orientation defects in molecular cytstals is given. The specific heat at constant volume and the Grueneisen coefficient for crystalline methane are calculated and a possible explanation of the low values for the Grueneisen co-

Card 1/2

L 21248-66

ACC NR: AP6005439

efficients is offered. The graphs of the temperature dependence of the linear expansion coefficient for crystalline nitrogen, oxygen, and methane are presented. Authors thank V. I. Peresada, B. Ya. Sukharevskiy, L. S. Kukushkin, and I. O. Kulik for valuable discussions. Orig. art. has: 5 figures, 1 table, and 3 formulas. [JKP]

SUB CODE: 20/ SUBM DATE: 11Nov65/ ORIG REF: 001/ OTH REF: 001/ SOV REF: 004/

Card 2/2 RLG

VOYTOVITSKIY, V.K.

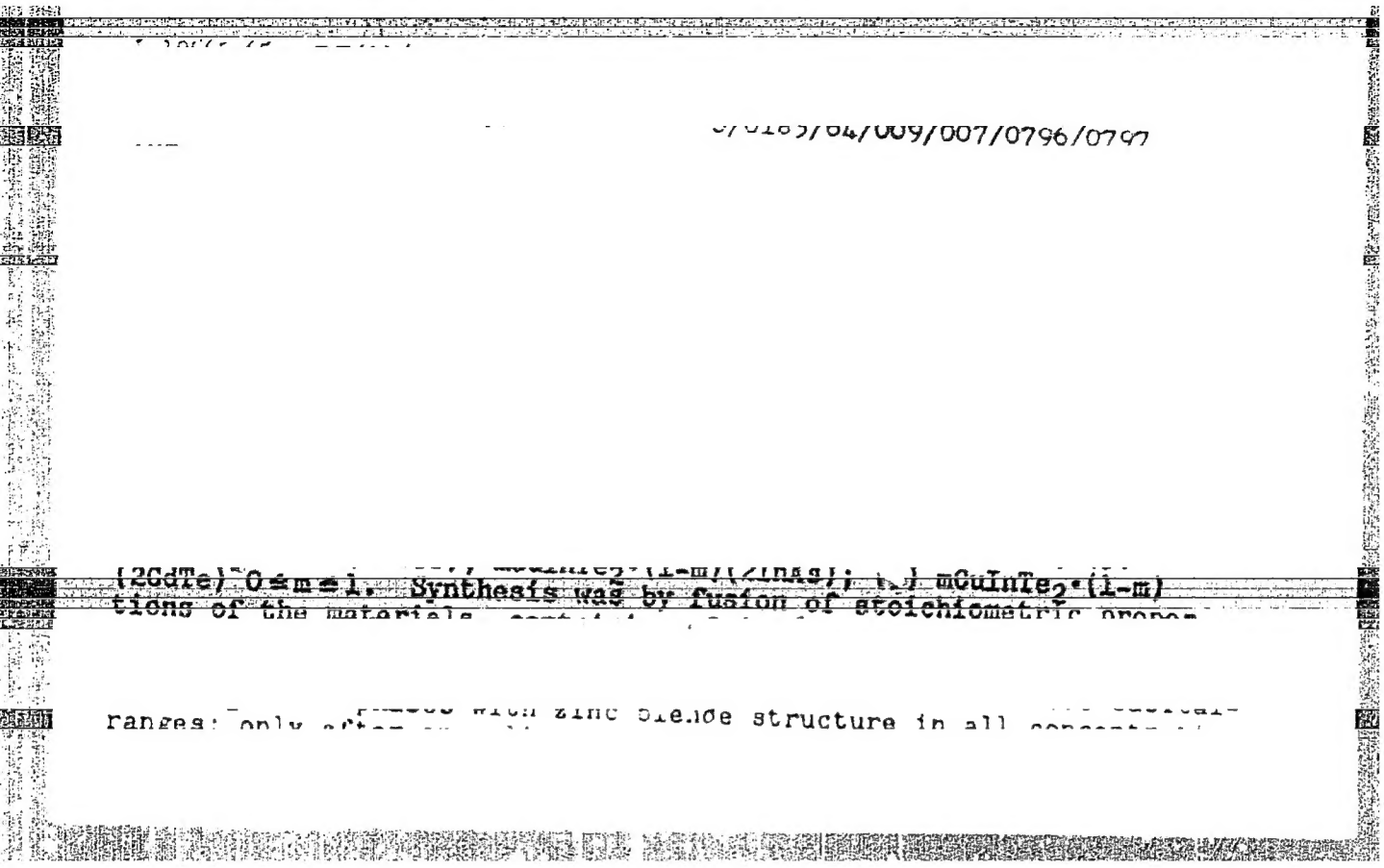
Characteristics of a new strain of transplantable mouse sarcoma A/Sn-
OMZh. Vop. onk. 10 no.5:60-66 '64. (MIRA 18:8)

1. Iz laboratorii tsitogenetiki (zav. - doktor biolog. nauk Ye.Ye. Poposyants) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR (dir. - deystvitel'nyy chlen AMN SSSR prof. N.N.Blokhin). Adres avtora: Moskva, I-110, ul. Shchepkina, 61/2, korpus 9, Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR.

VOYTREVICH, A. A.

42664. VOYTREVICH, A. A. Ob Antitireoidnom. Deystvii Tiotsianata Kaliya. Byulleten' Eksperim. Biologii i Meditsiny, 1948, No 12, s 452-55

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949



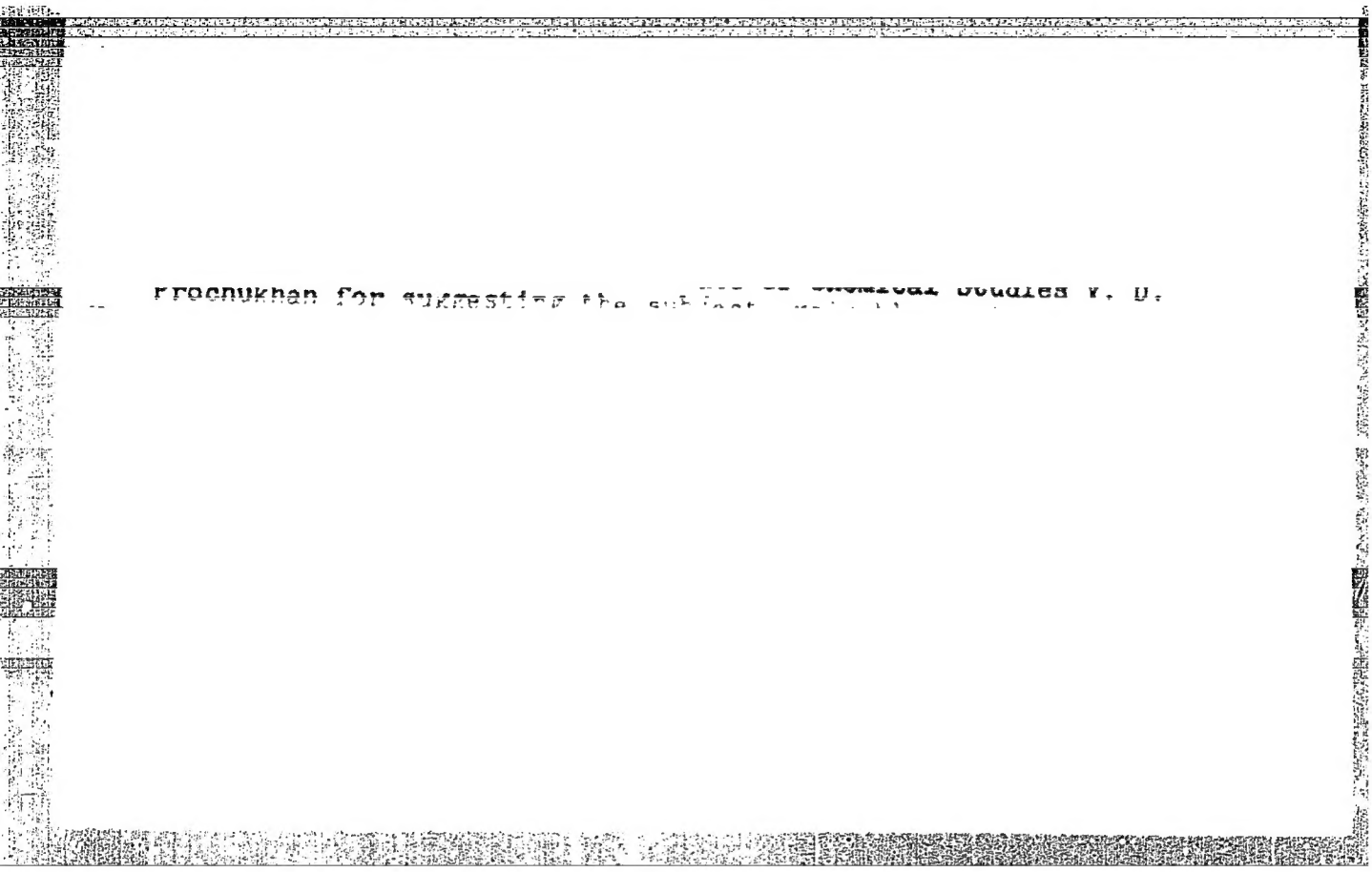
$(2CdTe)_{1-m}(mCuInTe_2)$ $0 \leq m \leq 1$. Synthesis was by fusion of stoichiometric propor-

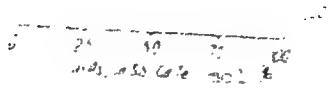
tions of the materials

ranges; only

with zinc blende structure in all

of the phases. Examination of the [illegible] may partial equilibration





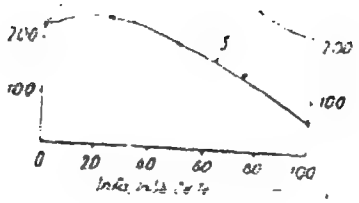


Fig. 1. Parameter dependence of crystalli: lattice a from the percentage composition

L 15157-66 EWT(1)/EWP(e)/EWT(m)/EWP(b) WH

ACC NR: AP6002028 SOURCE CODE: UR/0185/65/010/012/1349/1353

AUTHORS: Voytsekhivs'kyy, O. V. (Voytsekhovskiy, A. V.); Kesamanly, F. P.; Rud', Yu. V.; Mityur'ov, V. K. (Mityurev, V. K.)

ORG: Kiev Pedagogical Institute im. O. M. Gor'kiy (Kyyivs'kyy pedinstytut)

TITLE: Transport effects in InAs-CdTe and InAs-ZnTe alloys

SOURCE: Ukrayins'kyy fizichnyy zhurnal, v. 10, no. 12, 1965, 1349-1353

TOPIC TAGS: indium alloy, electric conductivity, Hall constant, thermoelectric power, heat conduction, electron mobility, electric measurement

ABSTRACT: Samples of various compositions of the InAs-CdTe and InAs-ZnTe alloys were prepared by melting the constituent materials of purity no worse than 99.999% in quartz ampoules, using vibrational mixing. After zone recrystallization, the samples were coarse-grained. The electrical measurements were carried out on right parallelepipeds cut from ingots with mean dimensions of 1.0 x 3.0 x 12.0 mm with ohmic electrodes of pure indium. Measurements were made of the electrical conductivity, the Hall constants, the Nernst-Ettingshausen effect over a temperature range of 800--600K, the differential thermal emf, the coefficient of thermal conductivity, and the transmission spectrum at

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L 15157-66
ACC NR: AP6002028

3

300K. It is proposed that the band structures of alloys of the InAs-CdTe system and of the initial compounds are analogous. The mechanism of carrier scattering is discussed. The effective electron mass for alloys of the system InAs-CdTe is found to be 0.05 m_0. The small value of the effective electron mass at a concentration of about 10^{19} cm^{-3} and the regular variation of E_{opt} as a function of the alloy composition indicate that by purification of the investigated substances one can obtain material with high electron mobility for a given width of the forbidden band. Authors thank Professor D. M. Naslyedov and N. O. Horyunova (Goryunova) for interest in the work. Orig. art. has: 3 formulas, 1 table, and 4 figures.

SUB CODE: 20/ SUBM DATE: 15Dec64/ ORIG REF: 009/ OTH REF: 005

Card 2/2 vmb

L 14012-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1)
ACC NR: AP6003400 SOURCE CODE: UR/0102/65/000/005/0021/0025

AUTHOR: Voytsekhivs'kyy, V.B. – Voytsekhovskiy, V.B. (Ivano-Frankivs'k) 35 B

ORG: none

TITLE: A method for the determination of dynamic characteristics of a linear object taking into account the registration errors of the input signal

SOURCE: Avtomatyka, no. 5, 1965, 21-25

TOPIC TAGS: linear automatic control, control system stability, dynamic system

ABSTRACT: A method is proposed for the theoretical determination of the dynamic characteristics of controlled linear objects for the case when both the output and input signals contain interference terms. The author assumes that the perturbations are not mutually correlated and that they are not correlated with the signals. The method utilizes the correlation function moments; the moment calculation accuracy is also given. The author thanks M.I. Obuvalin for his help during the investigation. Orig. art. has: 26 formulas.

SUB CODE: 13 09/ / SUBM DATE: 19Oct64 / ORIG REF: 001 / OTH REF: 001

Card 1/1 BC

2

L 6994-66 EWT(1)/EWA(h)

ACC NR: AP5026819 SOURCE CODE: UR/0266/65/000/017/0095/0095

INVENTOR: Khil'chevskiy, G. L.; Voytsekhov, Yu. R.; Tul'chinskaya, K. V.; Lazarev, N. V.; Vodolagin, V. Yu.

58
B

ORG: none

TITLE: An ultrasonic pickup. Class 42, No. 174452 [announced by Experimental Research and Design Office of the Black Sea Council of National Economy (Eksperimental'no-issledovatel'skoye i konstruktorskoye byuro Chernomorskogo Sovnarkhoza)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 95

TOPIC TAGS: piezoelectric transducer, ultrasonic inspection, waveguide

ABSTRACT: This Inventor's Certificate introduces an ultrasonic pickup designed for studying gaseous media. The device consists of a housing containing a piezoelectric transducer and a waveguide. Interference from the walls of the vessel being monitored is absorbed by making the housing in the form of a cylindrical labyrinth with rifling.

SUB CODE: EC,IE/ SUBM DATE: 05Oct64/ ORIG REF: 000/ OTH REF: 000

Card 1/2 UDC: 534.232-8

L 6994-66

ACC NR: AP5026819

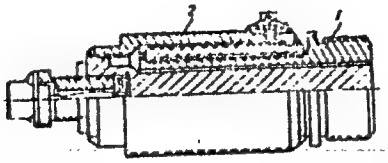


Fig. 1. 1 - housing; 2 - rifling.

Card 2/2 nda

VOYTSEKHOVICH, B.V.

USSR/ Miscellaneous

Card 1/1 Pub. 89 - 8/27

Authors : Voytseknovich, B. V.

Title : For further technical progress

Periodical : [illegible] Apr 1955

Abstract : The needs for further mechanization and specialization of [illegible] of new ideas and manufacturing techniques are outlined by the chief engineer of the Kazan Radio Manufacturing Plant.

Institution : .....

Submitted : .....

FINKEL'SHTEYN, Lev Aleksandrovich; GIRSHMAN, Gersha Khaimovich; VOYTSEKHOVICH, B.V., retsenzent; GEORGENBERG, R.I., retsenzent; BESCHASTNOV, N.S., red.; POLYAK, N.Yu., red.; ZHITNIKOVA, O.S., tekhn.red.

[Antenna circuits for wide-band shortwave transmitters; design and construction] Antennye kontury shirokodiapazonnykh korotkovolnovykh peredatchikov; raschet i konstruirovanie. Moskva, Gos.energ. izd-vo, 1960. 263 p. (MIRA 13:9)
(Radio, Shortwave--Antennas)

VOYTSEKHOVICH, G.V.

The fulcrum. Grazhd. av. 22 no.7:8-9 Jl '65. (MIRA 18:7)

1. Nachal'nik Upravleniya inzhenerno-aviatsionnoy sluzhby Ministerstva grazhdanskoy aviatsii.

VOYTSEKHOVICH, L. A.

USSR/Geological Prospecting Dec 48
Petroleum Deposits

"The Problem Concerning the Paragenesis of Titanium Organic Carbon, and Several Other Elements," L. V. Khmelevskaya, N. G. Morozova, K. I. Tagaev, S. N. Katchenkov, L. A. Voytsekhovich, All-Union Petroleum Sci Res Geol Prospecting Inst, 3 pp

"Dok Ak Nauk SSSR" Vol LXIII, No 6

Spectrographic and statistical analysis of 67 sandstones taken from Maykopskiy, Chokrakskiy, Karagandskiy, and Sarmatskiy deposits in the layer of oilbearing deposits of Groznenskiy Rayon, Terskiy Oblast. Found that presence of organic carbon, vanadium, manganese, titanium, nickel, barium and strontium in various lithologic groups -- sand-silt-stone, clay, and carbon -- was not connected exclusively with any of them. Submitted by Acad D. S. Belyankin, 27 Oct 48.

PSB PA 35/49T46

VOYTSEKHOVICH, M.

Pectin

Gelatine forming pectic from the press., Sakh. prom., 26, No. 1, 1952. Reviewed by B. L. Zaslovskiy, V. A. Zambrovskiy.

9. Monthly List of Russian Accessions, Library of Congress, April 1952 ~~1953~~, Uncl.

VOYTSEKHOVICH, MD

Tobacco Manufacture and Trade

Moistening tobacco in the humidifier (TUM). Tabak 13 No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED

VOYTSEKHOVICH, N. D., Cand Med Sci — (diss) "Disturbance of functions of the cardiovascular system in burn traumax." Mos, 1958. 13 pp (Central Inst for Advanced Training of Physicians), 200 copies (KL, 15-58, 118)

VOYTSEKHOVICH, M.D.

Changes in the cardiovascular system in burns. Voen.med.zhur.
no.12:17-24 D'57 (MIRA 11:5)
(BURNS, pathology,
cardiovasc. system (Rus))
(CARDIOVSCULAR SYSTEM, in var.dis.
burns (Rus))

VOYTSEKHOVICH, N.D.; KOVALEVA, N.N.

Effect of onset of jaundice on the course of rheumatoid arthritis. Sovet.med. No.3:25-26 Mar 51. (CLML 20:6)

1. Of the Faculty Therapeutic Clinic (Director--Prof.Ye.M.Tareyev), Moscow Medical Institute, and of Blagushinsk Hospital.

USSR/Human and Animal Physiology (Normal and Pathological). T
Blood Circulation. General.

Abs Jour: Ref Zhur-Biol., No 17, 1958, 79518.

Author : Voytsekhovich, N.D.
Inst :
Title : Change of The Cardio-Vascular Systen During Thermal Injury.

Orig Pub: Voyen.-med. zh. 1957, No 12, 17-24.

Abstract: No abstract.

Card : 1/1

VOYTSEKHOVICH, S.F., polkovnik med.sluzhby

Uniform analysis of morbidity in a military unit. Voen.-med. zhur. no. 2:16-18 F '61. (MIRA 14:2)
(MEDICINE, MILITARY) (DISEASES--REPORTING)

VOYTSEKHOVICH, T.V.

Coefficients of the variation of morphological and biological features in the subspecies of dent corn and popcorn under various conditions of mineral nutrition. Vop. biol. i kraev. med. no.4:68-74 '63. (MIRA 17:2)

VOYTSEKHOVICH, T.V.

Effect of mineral food on the growth, development and ear yield of different corn subspecies. Vop.biol.i kraev.med. no.3:105-110 '62. (MIRA 16:3)
(UZBEKISTAN—CORN (MAIZE)—FERTILIZERS AND MANURES)

MEL'NIKOV, A.M.; [redacted]OYTOVICH, Ye.D.

Oil potential of the terrigenous Devonian in the western part of the Melekes Depression. Geol.nefti i gaza 6 no.4:9-15 Ap '62. (MIRA 15:4)

1. Trest Tatneftegazrazvedka.
(Melekes Depression--Petroleum geology)

VOYTSEKHOVSKAYA, A.A.

Representatives of Endothyridae family (Foraminifera) from lower Carboniferous sediments in the Far North. Sbor.st.po paleont. i biostrat. no.24:16-45 '61. (MIRA 15:2)
(Russia,Northern--Foraminifera,Fossil)

SHEVLYAGINA, Ye.V.; VOYTSEKHOVSKAYA, A.L.; PASHININA, Ye.I.

Stabilization of stone-fruit oils during storage. Trudy VNIISNDV no.4:119-125 '58. (MIRA 12:5)
(Oils and fats--Storage)
(Antioxidants)

VOYTSEKHOVSKAYA, A.L.

Utilization of vitamin F in cosmetics. Masl.-zhir.prom. 25 no.3:26-28 '59. (MIRA 12:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh i natural'nykh dushistykh veshchestv.
(Cosmetics) (Acids, Fatty)

VOYTSEKHOVSKAYA, A.L.; SHEVLYAGINA, Ye.V.; GUSHCHINA, Ye.I.

Preparation of linoleic and linolenic acid esters (vitamin F). Report No.1. Preparation of vitamin F. Trudy VNIISNDV no.5: 124-128 '61. (MIRA 14:10)
(Linoleic acid) (Linolenic acid) (Cosmetics)

VOYTSEKHOVSKAYA, A.L.; BELOV, V.N.

Synthesis of γ,δ -substituted δ -lactones. Report No.1.
Trudy VNIISNDV no.6:62-66 '63.

Synthesis of γ,δ -substituted δ -lactones. Report No.2.
Ibid.:66-73 (MIRA 17:4)

VOYTSEKHOVSKAYA, A.L.; SHEVLYAGINA, Ye.V.

Preparation of linoleic and linolenic acid esters (vitamin F). Report No.2. Stabilization of vitamin F. Trudy VNIISNDV no.5: 128-134 '61. (MIRA 14:10)
(Linoleic acid) (Linolenic acid) (Cosmetics)

VOYTSEKHOVSKAYA, A.L.; SHEVLYAGINA, Ye.V.; GUSINCHINA, Ye.I.

Preparation of cetiolan, a new kind of cosmetic material.
Trudy VNIISNDV no.5:134-135 '61. (MIRA 14:10)
(Cosmetics) (Acids, Fatty)

KIRILLOV, M.I., VOYTSEKHOVSKAYA, A.M., KIRILLOVA, N.Ye.

Investigating the stability of active bleaching solutions used in the processes introduced by the Scientific Research Institute of Motion-Pictures and Photography. Usp.nauch.fot. 7:230-235 '60. (MIRA 13:7)
(Color photography) (Photographic chemistry)

KIRILLOV, N.I., VOYTSEKHOVSKAYA, A.M., KIRILLOVA, N.Ye.

Investigating the thermostatic aging of the color image on a multiple-layer film processed by various methods. Usp.nauch.fot. 7:240-245 '60. (MIRA 13:7)
(Color photography)

VOYTSEKHOVSKAYA, A.M.

PHASE I BOOK EXPLOITATION SOV/4159

Akademiya nauk SSSR. Komissiya po nauchnoy fotografii i kinematografii

Uspekhi nauchnoy fotografii, tom 7: Priroda fotograficheskoy chuvstvitel'nosti. Izgotovleniye galoidoserebryanykh fotograficheskikh sloyev. Opticheskaya sensibilizatsiya i gipersensibilizatsiya. Khimiko-fotograficheskaya obrabotka svetochuvstvitel'nykh sloyev (Nature of Photographic Sensitivity. Preparation of Haloid-Silver Photographic Layers. Optical Sensitizing and Hyper-Sensitizing. Chemical-Photographic Treatment of Photo-Sensitive Layers) Moscow, 1960. 260 p. Errata slip inserted. 1,800 copies printed.

Editorial Board: K.V. Chibisov (Resp. Ed.) Corresponding Member, Academy of Sciences USSR, V.I. Sheberstov (Deputy Resp. Ed.) Candidate of Chemical Sciences, Docent, Yu. N. Gorokhovskiy, Doctor of Chemical Sciences, Professor, G.A. Istomin, Doctor of Technical Sciences, Professor, and I.I. Levkoyev, Candidate of Chemical Sciences; Ed. of Publishing House: K.I. Markhilevich; Tech. Ed.: S.G. Simkina.

PURPOSE: This collection of articles is addressed to those working in theoretical and applied photography and cinematography, and to researchers in the chemistry and physics of photographic processes.

COVERAGE: The collection contains articles from the editorial files of the Zhurnal nauchnoy i prikladnoy fotografii i kinematografii discussing problems in the preparation and processing of haloid silver light-sensitive layers, the nature of photographic sensitivity, the preservability of photographic layers, the theory and technology of the preparation of photographic emulsions and optical sensitization, and, finally, the chemical photographic processing of black-and-white and color photographic materials. Many of the articles contain the results of scientific investigations made by the authors. The collection also includes several reviews of current problems in the theory of chemical-photographic processes. A bibliography of Soviet and non-Soviet references accompanies each article.

AVAILABLE: Library of Congress

Card 7/7

JA/lnb/mas (17)
10-24-60

ZHUKHOVITSKIY, S.Yu.; VOYTSEKHOVSKIY, A.P.

A possible cause of pipe freezing. Azerb. neft. khoz. 40 no.1:24 Ja '61. (MIRA 14:8)
(Pipe)

VOYTSEKHOVSKAYA, I. A.

USSR/Chemistry - Antimony Compounds
Spectra, Absorption

Aug 49

"Influence of the Aggregate State Upon the Absorption Spectrum of Antimony Triiodide (SbI_3), K. V. Butkov, I. A. Voytsekhovskaya, Lenirgrad Mining Inst, 4 pp

"Dok Ak Nauk SSSR" Vol LXVII, No 6

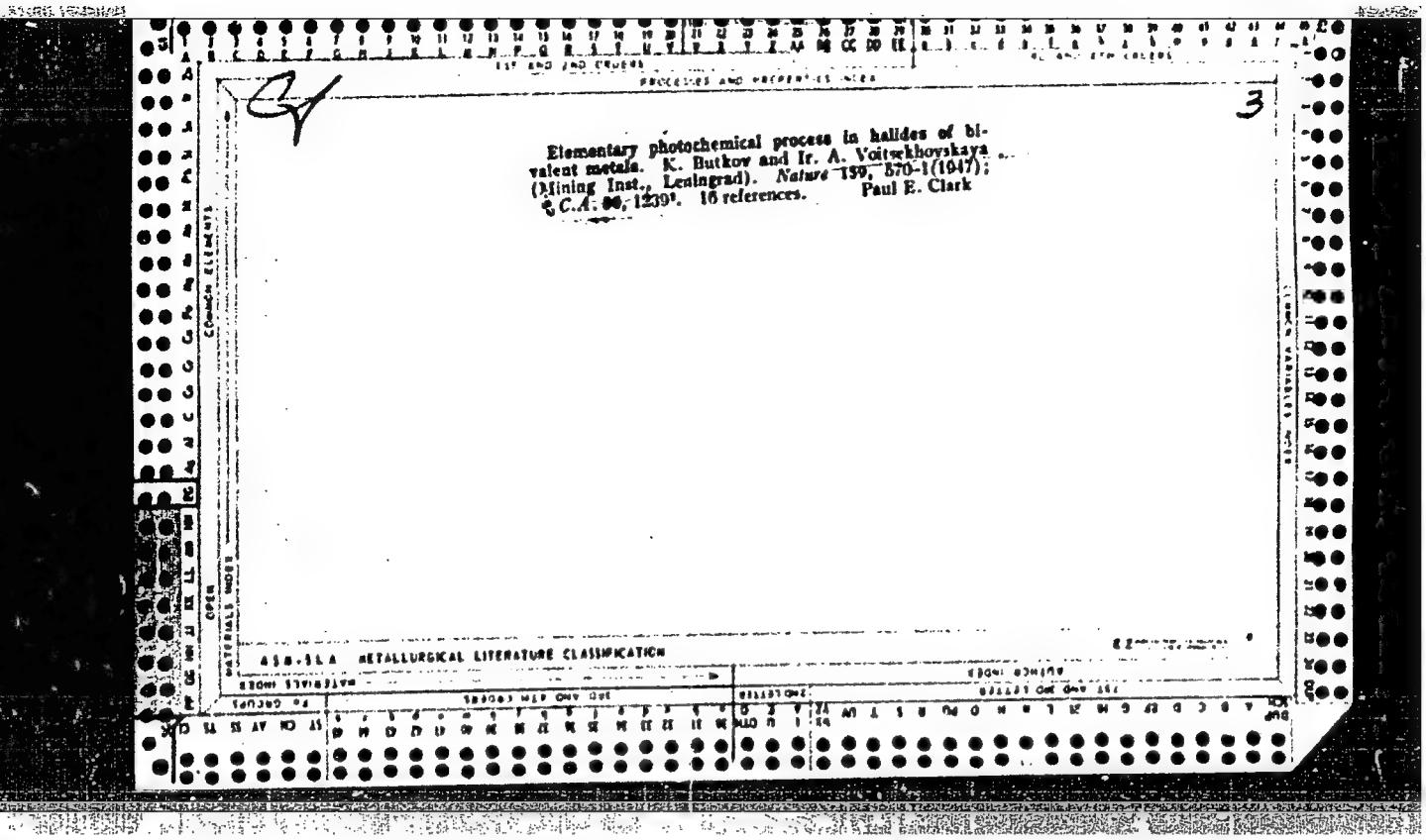
Earlier work by Rechinskiy and Moll'vo convinced authors that the influence of the nature of the chemical bond on the shift of the long-wave absorption band (V_k-V_f) in crystalfusion transition is similar to the one they discovered in crystal-gas transition. In typical ionic compounds (with ionic crystal lattices and ionic molecules in the gaseous phase) V_k-vf is greater than 0 while in silver chloride, with an ionic crystal lattice and an atomic molecule in the gaseous phase, V_k-vf equals 0. Experiments confirmed the assumption that in halides with an atomic bond, e.g., antimony triodide, vk-vf is less than 0. Submitted by Acad A. A. Lebedev 25 Jun 49

PA 1/50T21

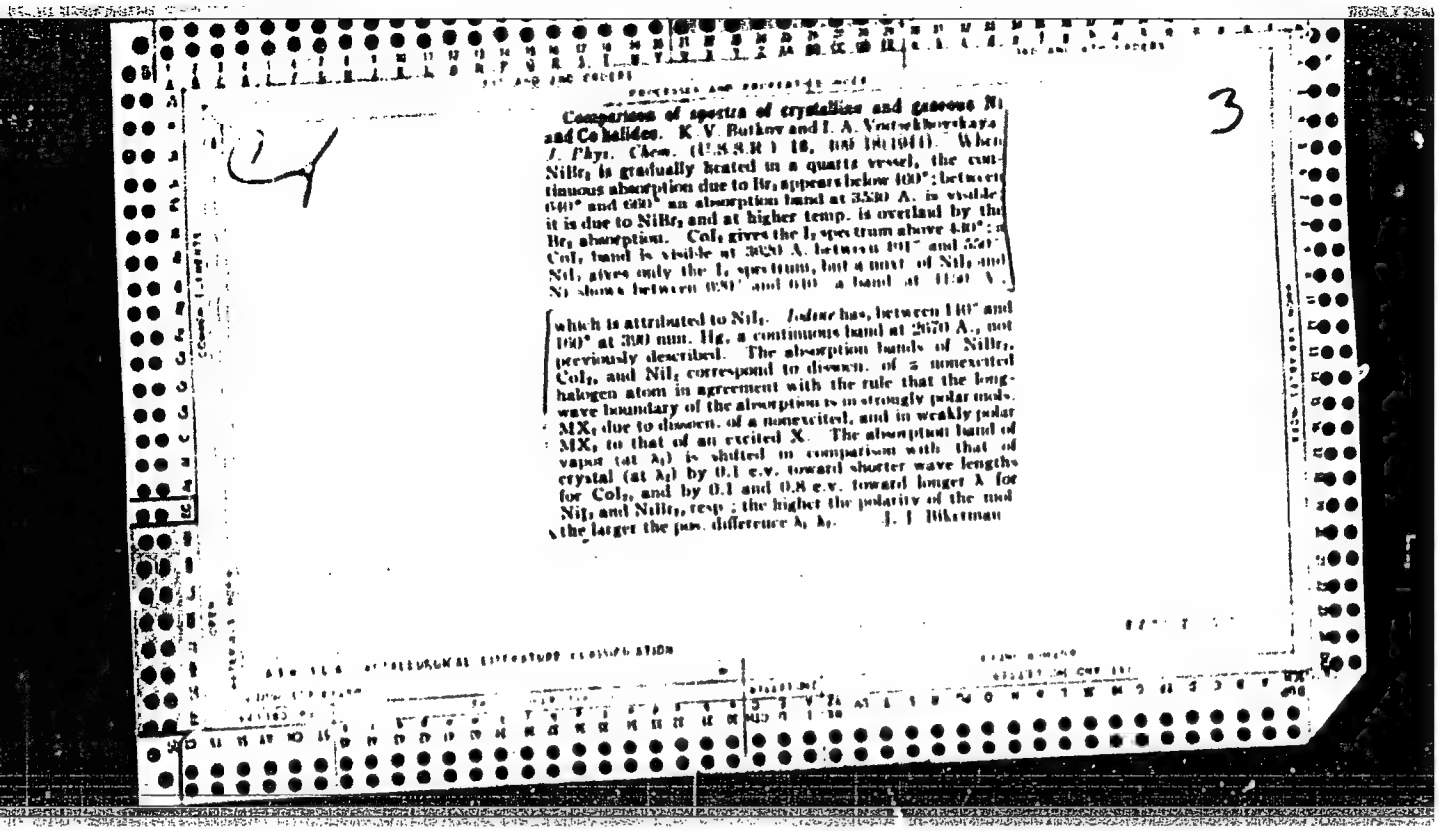
VOITSEKHOVSKAYA I. A.

26909. BUTKOV, K. V., VOITSEKHOVSKAYA I. A., vliyaniye agregatnogo sostoyaniya na spektr pogloshcheniya trekhiodistoy sur'my. doklady akad. nauk SSSR. no va va seriya t. LXVII, No. 6 1949, s. 989-92-bibliogr: s. 992

SO: Letopis'Zhurnal'nykh Statey, Vol. 36, 1949.



Elementary photochemical process in halides of bivalent metals. K. Butkov and Ir. A. Voitsekhovskaya (Mining Inst., Leningrad). *Nature* 159, 870-1(1947); C.A. 41, 1239i. 16 references. Paul E. Clark



Comparison of spectra of crystalline and gaseous Ni and Co halides. K. V. Butkov and I. A. Vinokhorskaya. *J. Phys. Chem.* (U.S.S.R.) **18**, 848 (1944). When $NiBr_2$ is gradually heated in a quartz vessel, the continuous absorption due to Br_2 appears below 400°; between 440° and 620° an absorption band at 3530 A. is visible; it is due to $NiBr_2$ and at higher temp. is overland by the Br_2 absorption. CoI_2 gives the I_2 spectrum above 430°; a CoI_2 band is visible at 3950 A. between 401° and 520°. NiI_2 gives only the I_2 spectrum, but a mist of NiI_2 and Ni shows between 630° and 640° a band at 4150 A., which is attributed to NiI_2. *Iodine* has, between 180° and 190° at 300 mm. Hg, a continuous band at 2670 A., not previously described. The absorption bands of $NiBr_2$, CoI_2, and NiI_2 correspond to dissocn. of a nonexcited halogen atom in agreement with the rule that the long-wave boundary of the absorption is in strongly polar mols. MX_2 due to dissocn. of a nonexcited, and in weakly polar MX_2 to that of an excited X. The absorption band of vapor (at λ_1) is shifted in comparison with that of crystal (at λ_2) by 0.1 e.v. toward shorter wave lengths for CoI_2, and by 0.1 and 0.8 e.v. toward longer λ for NiI_2 and $NiBr_2$, resp.; the higher the polarity of the mol. the larger the pos. difference $\lambda_1 - \lambda_2$. J. J. Bikerman

POPYRIN, L.S., kand. tekhn. nauk; KARPOV, V.G., inzh.; PSHENICHNOV, M.M.; VOYTSEKHOVSKAYA, G.V.

Use of digital computers in the choice of optimum finite parameters of large condensing turbine systems. Teploenergetika 10 no.12:26-33 D '63. (MIRA 17:8)

1. Energeticheskiy institut Sibirskogo otdeleniya AN SSSR.

KUZNETSOV, Yu.A.; MAKAROV, A.A.; MELENT'YEV, L.A.; MERENKOV, A.P.; NEKRASOV, A.S.; TSVETKOV, N.I.; KUZNETSOV, Yu.A.; MAKAROVA, A.S.; KARPOV, V.G.; MANSUROV, Yu.V.; SYROV, Yu.P.; KHRILEV, L.S.; TSVETKOVA, L.A.; VOYTSEKHOVSKAYA, G.V.; YEFIMOV, N.T.; LEVENTAL', G.B.; KHANAYEV, V.A.; BELYAYEV, L.S.; GAMM, A.Z.; KARTELEV, B.G.; KRUMM, L.A.; LIOPO, T.N.; SVIRKUNOV, N.N.; DRUZHININ, I.P.; KONOVALENKO, Z.P.; KHAM'YANOVA, N.V.; SHVARTSBERG, A.I.; NIKONOV, A.P.; STARIKOV, L.A.; POPYRIN, L.S.; PSHENICHNOV, N.N.; TROSHINA, G.M.; CHEL'TSOV, M.B.; SVETLOV, K.S.; SUMAROKOV, S.V.; TAKAYSHVILI, M.K.; TOLMACHEVA, N.I.; KHASILEV, V.Ya.; KOSHELEV, A.A.; KUDINOVA, L.I., red.

[Methods for using electronic computers in the optimization of power engineering calculations] Metody primeneniia elektronno-vychislitel'nykh mashin pri optimizatsii energeticheskikh raschetov. Moskva, Nauka, 1964. 318 p. (MIRA 17:11)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Energeticheskiy institut. 2. Chlen-korrespondent AN SSSR (for Melent'yev).

84607

24,2400(1144,1162,1385)

S/181/60/002/010/030/051
B019/B056

AUTHORS: Voytsekhovskaya, I. A., Golubeva, L. A., Tyutyunnikova, Ye. V.

TITLE: Investigation of the Properties of Alkali-halide Crystals. The Dielectric Losses in KCl(Ba)-Crystals

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 10, pp. 2536 - 2539

TEXT: tan δ was measured for KCl single crystals, which were activated with bivalent barium ions. Measurements were carried out at $300 - 1.5 \cdot 10^3$ c and at temperatures between -55 and +60°C. It was found that the dielectric losses had a relaxation-character. tan δ as a function of the frequency has three maxima. The first maximum is caused by dipole-oscillations, which are formed in the association of Ba^{++} with cationic vacancies of the medium. The second maximum may be caused by the same dipole oscillations, if the impurity ions form a second lattice, which is built into the KCl-lattice. The existence of the third

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Investigation of the Properties of Alkali-halide Crystals. The Dielectric Losses in KCl(Ba)-Crystals

S/181/60/002/010/030/051
B019/B056

maximum could not be explained, and requires further investigation. From the dependence of tan δ on the direction of the growth of the crystals, the conclusion is drawn that the impurity concentration during crystal growth was non-uniformly distributed. With the help of the formula by Lidiard (Ref.6), the impurity concentration is estimated as being $3.5 \cdot 10^{-3}$ mole% from tan δ. This work was carried out at the Kafedra eksperimental'noy fiziki Leningradskogo politekhnicheskogo instituta imeni M. I. Kalinina (Chair of Experimental Physics of Leningrad Polytechnic Institute imeni M. I. Kalinin). There are 2 figures and 6 references: 2 Soviet and 1 Japanese.

ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute imeni M. I. Kalinin)

SUBMITTED: November 19, 1959 (initially), February 18, 1960 (after revision)

Card 2/2

VOYTSEKHOVSKAYA, I.A., kand. fiziko-matematicheskikh nauk, dotsent;
REKALOVA, G.I., kand. fiziko-matematicheskikh nauk, dotsent;
KUROPOVA, P.M., assistent

Determination of the optimum parameters of an uncooled antimony-indium photocell. Izv. LETI no.47:316-334 '62. (MIRA 16:12)

VOYTSEKHOVSKAYA, I.A.; GRAMMAKOV, A.G., prof.; YERMOLOVA, A.P.; LYATKOVSKAYA, N.M.; MALYSHEVA, T.D.; ORLOV, V.M.; PIGULEVSKIY, Ye.D.; VASILEVSKAYA, V.N., tekhn. red.

[Exercises in physics] Posobie k uprazhneniiam po fizike. Leningrad, Leningr. elektrotekhn. in-t im. V.I.Ul'ianova (Lenina). Part 3.[Optics, atomic physics] Optika, atomnaia fizika. 1962. 197 p. (MIRA 16:12)
(Physics--Problems, exercises, etc.)

VOYTSEKHOVSKAYA, I.A.; GOLUBEVA, L.A.; TYUTYUNNIKOVA, Ye.V.

Investigating the properties of alkali crystals; dielectric losses in KCl (Ba) crystals. Fiz. tver. tela 2 no.10:2536-2539 '60. (MIRA 13:12)

1. Leningradskiy politekhnicheskiy institut imeni M.I.Kalinina.
(Potassium chloride crystals—Electric properties)

VOYTSEKHOVSKAYA, I. A.

AUTHORS: Voytsekhovskaya, I. A., Golubeva, L. A., Tyutyunnikova, Ye. V. 57-27-7-25/40

TITLE: Concerning the Problem of the Dielectric Relaxation Losses in Ionic Crystals. (A Preliminary Report) (K voprosu o relaksatsionnykh dielektricheskikh poteryakh v ionnykh kristallakh. (Predvaritel'noye soobshcheniye)).

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1957, Vol. 27, Nr 7, pp. 1591-1593 (USSR)

ABSTRACT: The dielectric losses in monocrystals with simplest lattice were investigated. For this purpose monocrystals with a cross section of not less than 80 qmm were grown in a potassium-chloride melt. Pure potassium chloride which was additionally purified by repeated crystallization was used as raw material. The measurements of the tangent of the angle of dielectric losses in the frequency range of from 4.10^2 to 10^6 cycles showed that in pure crystals a distinctly marked relaxation-maximum exists at a frequency of about 7.10^3 cycles at $t = 20^oC$. On a rise of temperature this maximum is displaced in the direction of high frequencies. The general character of the dependence tgδ on the frequency, obtained by the

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Concerning the Problem of the Dielectric Relaxation Losses in Ionic Crystals. (A Preliminary Report) 57-27-7-25/40

experiment, is in good agreement with the curve calculated according to the formula. The activation energy amounted to about 0,3 eV. Besides the dependence tgδ on the temperature was here investigated at two frequencies -10^3 cycles and 5.10^4 cycles - in the temperature range of from -20 to +300°C. The activation energy amounted to about 0,3 eV. The result agrees with that obtained by G. I. Skanavi with regard to the fact that the dielectric losses in crystals of the KCl-types possess a relaxation-nature. Besides KCl-monocrystals with an admixture of a bivalent copper-ion in the form of $CuCl_2$ were investigated. It is shown that the maximum of tgδ, caused by the copper-ions, can only occur in the case of a sufficiently high additional concentration or at a sufficiently high temperature.
There are 4 figures and 7 references, 4 of which are Slavic.

SUBMITTED: December 29, 1956
AVAILABLE: Library of Congress
Card 2/2 1. Single crystals-Dielectric properties

VOYTSEKHOVSKAYA, I. A.

Dissertation: "Absorption Spectra During Heat Dissociation of Certain Metal Halogenides and the Effect of the State of Aggregation on the Absorption Spectra of Some Inorganic Compounds." Cand Phys-Math Sci, Leningrad Electrical Engineering Inst, Leningrad, 1953. (Referativnyy Zhurnal--Khimiya, Moskva, No 10, May 54)

SO: SUM 318, 23 Dec 1954

ZHMUROVA, I.N.; VOYTSEKHOVSKAYA, I.Yu.

Phenylphosphinic acid diamides. Zhur.ob.khim. 33 no.4:1349-1351 Ap '63. (MIRA 16:5)

1. Institut organicheskiy khimii AN UkrSSR.
(Phosphinic amide)

5 (3)

AUTHORS: Zhmurova, I. N., Voytsekhovskaya, I. Yu., SOV/79-29-6-67/72
Kirsanov, A. V.

TITLE: Direct Amidation of Carboxylic Acids (Neposredstvennoye amidirovaniye karbonovykh kislot)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 2083 - 2088 (USSR)

ABSTRACT: In this investigation the authors attempted to extend the scope of application of direct amidation of carboxylic acids, under "softer conditions in a pyridine solvent" (Ref 3) without examining the question of amidation under "harder conditions at higher temperatures". Different amides affect carboxylic acids quite differently. It is especially unintelligible that several homologues and analogues of trianilide of the phosphoric acid do not react with carboxylic acids, when heated in pyridine. The question was of interest, whether the amides of the monobasic phosphoric acids occur in pyridine as an agent of amidation, and whether for amidation under "soft conditions" the presence of two groups of amides in the molecule is necessary, in which at least one "free" hydrogen atom, connected with the nitrogen atom of the amide group (Ref 2) has to be present.

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Direct Amidation of Carboxylic Acids SOV/79-29-6-67/72

Amides of the type $(RO)_2PONH_2$ and Ar_2PONH_2 and their N-substituted compounds were selected as samples to be analysed. The amide and the dimethyl amide of the diphenylphosphinic acid amidate the carboxylic acids, when heated in pyridine or dioxane and are very easily saponified. The amidation capacity of the amides of the diphenylphosphinic and diphenylthiophosphinic acids corresponds to their easiness of saponification i.e. to their capacity to combine with hydroxyl. The amide, dimethylamide and phenylamide of the diphenylthiophosphinic acid and the phenylamide of diphenylphosphinic acid do not amidize the carboxylic acid under the same conditions, and it is difficult to saponify them. The mechanism of amidation of carboxylic acids with amide and dimethylamide of the diphenylphosphinic acid differs from the mechanism of amidation of the carboxylic acids with amides of the sulphuric acid. Some amides of the diphenylphosphinic and diphenylthiophosphinic acid were synthesized. The amidation with the amide of the diphenylphosphinic acid, according to the scheme

$$RCOOH + (C_6H_5)_2PONH_2 \longrightarrow RCONH_2 + (C_6H_5)_2POOH$$

Card 2/3 takes place especially smoothly. In the table amides of both

phosphinic acids are listed. There are 1 table and 11 references, 2 of which are Soviet.

ASSOCIATION: Institut organicheskoy khimii Akademii nauk Ukrainskoy SSR (Institute of Organic Chemistry of the Academy of Sciences of the Ukrainian SSR)

SUBMITTED: May 6, 1958

ZHMUROVA, I.N.; VOYTSEKHOVSKAYA, I.Yu.

Alkyltetrachloro phosphorus. Zhur.ob.khim. 35 no.12:2197-2200 D '65. (MIRA 19:1)

1. Institut organicheskoy khimii AN UkrSSR. Submitted January 18, 1965.

ZHMUROVA, I.N.; VOYTSEKHOVSKAYA, I.Yu.; KIRSANOV, A.V.

Triphenoxyphosphazoaryls. Zhur. ob. khim. 31 no. 11:3741-3764 N '61. (MIRA 14:11)

1. Institut organicheskoy khimii AN Ukrainskoy SSR.
(Phosphazo compounds)

VOYTSEKHOVSKAYA, K.F.
VOYTSEKHOVS'KA, K.F.

On the stability of a rectangular plate compressed beyond the limits of elasticity. Dop. AN URSR no.2:121-124 '57.
(MLRA 10:5)

1. Institut matematiki AN URSR. Predstaviv akademik AN URSR O.Yu. Ishlins'kiy.
(Elasticity)

L 25610-66 EWT(m)/EWP(j) RM

ACC NR: AP6016698 SOURCE CODE: UR/0079/65/035/012/2197/2200

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B

AUTHOR: Zhmurova, I. N.; Voytsekhovskaya, I. Yu.

ORG: Institute of Organic Chemistry, AN UkrSSR (Institut organicheskoy khimii AN UkrSSR)

TITLE: Phosphorus alkyltetrachlorides

SOURCE: Zhurnal obshchey khimii, v. 35, no. 12, 1965, 2197-2200

TOPIC TAGS: chlorinated organic compound, phosphoric acid, sulfur compound

ABSTRACT: When treated with chlorine at -20 to 15°, isopropyl-, butyl-, isobutyl, amyl- and isoamyldichlorophosphines yield unstable alkyktetrachlorophosphoruses which decompose when heated above 0°. At 20-30° butyldichlorophosphine is chlorinated to dichlorobutyltetrachlorophosphorus, and propyldichlorophosphine is converted into propyltetrachlorophosphorus. Alkyltetrachlorophosphoruses react with sulfur dioxide or succinnic acid to form the acid dichlorides of alkylphosphonic acids, $RPOCl_2$, where R = $n\text{-}C_3H_7$, $iso\text{-}C_3H_7$, C_4H_9, $iso\text{-}C_4H_9$, $C_4H_7Cl_2$, C_5H_{11} or $iso\text{-}C_5H_{11}$ whose characteristics are presented.

The authors express their thanks to A. V. Korsanov for aid and council on the research. Orig. art. has: 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 18Jan65 / ORIG REF: 008 / OTH REF: 009

UDC: 457.241

Card 1/1 FV

14(10) SOV/20-123-4-12/53

AUTHOR: Voytsekhovskaya, K. F.

TITLE: The Stability of Cylindrical Shells From the Point of View of the Mathematical Theory of Elasticity (Ustoychivost' tsilindricheskikh obolochek s tochki zreniya matematicheskoy teorii uprugosti)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 4, pp 623-626 (USSR)

ABSTRACT: The present paper deals with the problem mentioned in the title without taking the components of the rotation of the cylindrical shells, but taking the deformation of the boundary surface of the body into account. A hollow cylinder with the internal and external radii R_1 and R_2 respectively is assumed to be compressed in the axial direction by the force p (referred to the unit of area). The lateral surface of the cylinder is assumed to be free from forces acting upon it. The authoress then determines that value of p at which, besides the principal state of equilibrium, there exists yet another equilibrium (that is infinitely more similar to the principal equilibrium). In this second equilibrium the lateral cylinder surface is also free from forces acting upon it, but it may, in this case, deviate from the cylindrical shape. First, the

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SOV/20-123-4-12/53

The Stability of Cylindrical Shells From the Point of View of the Mathematical Theory of Elasticity

axially-symmetric variant of stability loss is investigated. Here the stress function U does not depend on the azimuthal coordinate θ, and the problem of the compressibility of the hollow cylinder is reduced to solving the biharmonic equation $\nabla^4 U(r,z) = 0$. The corresponding boundary conditions are explicitly written down. Calculation is followed step by step. The expression thus obtained for the critical compressing force as well as for its minimum value is explicitly given. The authoress thanks Academician of the AS UkrSSR A. Yu. Ishlinskiy for bringing up the problem as well as for his directives for its solution. There are 1 figure and 5 Soviet references.

ASSOCIATION: Institut matematiki Akademii nauk USSR
(Institute of Mathematics of the Academy of Sciences, UkrSSR)

PRESENTED: July 7, 1958 by L.I.Sedov, Academician

Card 2/2

VOYTSEKHOVSKAYA, K. F.: Master Phys-Math Sci (diss) -- "The stability of elastic bodies from the standpoint of the mathematical theory of elasticity". Kiev, 1958. 5 pp (Acad Sci Ukr SSR, Joint Academic Council of the Insts of Physics, the Physics of Metals, and Math), 150 copies (KL, No 12, 1959, 125)

AUTHOR: Voytsekhovskaya, K . F.

20-119-5-17/59

TITLE: The Equilibrium Stability of Rods From the Point of View of the Mathematical Theory of Elasticity (Ustoychivost' ravnovesiya sterzhney s tochki zreniya matematicheskoy teorii uprugosti)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 5, pp. 903-906 (USSR)

ABSTRACT: The present paper investigates by means of the methods of the mathematical theory of elasticity the spatial problem of the stability of the compression of elastic cylindrical rods. A cylinder of the length l and of the radius R may be compressed by a load p equally distributed over the front phases. The lateral surface is to be kept free of loads. Then the state of tension in the cylindrical coordinates r, θ, z (the axis z be along the axis of the cylinder, and the axes r and θ be located in the middle cross section of the cylinder) is determined by the tensions $\sigma_r^0 = \sigma_\theta^0 = \tau_{r\theta} = \tau_{\theta z}^0 = \tau_{zr}^0 = 0$, $\sigma_z^0 = -p$, and the

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displacements $u_r^0 = (\nu\, p/E)r$, $u_z^0 = (-p/E)z$ correspond to these tensions. E denotes Young's modulus and ν the Poisson coefficient. The author investigates whether besides the main state of equilibrium of the cylinder (which is characterized by the above mentioned equations) any other state of equilibrium is possible which infinitely approximates the main state of equilibrium. In this the lateral surface of the body is also to be kept free of loads, it can, however, also be non-cylindrical. Three equations for the connection between the displacements and the tensions are put down. Then also equilibrium equations for the displacements, and limit conditions for the tensions on the deformed lateral surface of the cylinder are put down. Ansatzes for the functions u_r, u_θ and u_z follow, and by putting these into the equilibrium equations a system of 3 differential equations of second order with variable coefficients for the determination of the functions u(r), v(r) and w(r) occurring in these ansatzes is obtained. Also for this system of equations a solution ansatz is put

The Equilibrium Stability of Rods From the Point of View of the Mathematical Theory of Elasticity 20-119-5-17/59

down. Only in the case of a certain value of the compressing load a non trivial solution is obtained. At the end the author thanks Yu. A. Ishlinskiy, Member, AS Ukrainian SSR, for posing this problem and for directing the work. There are 2 references, 2 of which are Soviet.

ASSOCIATION: Institut matematiki Akademii nauk USSR (Institute of Mathematics, AS Ukrainian SSR)

PRESENTED: December 3, 1957, by L. I. Sedov, Member, Academy of Sciences, USSR

SUBMITTED: November 21, 1957

Card 3/3

VOYTSEKHOVSKAYA, K.F.

Mathematical theory of elasticity on the equilibrium stability of rods. Dokl. AN SSSR 119 no.5:903-906 Ap '58. (MIRA 11:6)

1.Institut matematiki AN USSR. Predstavleno akademikom L.I. Sedovym.
(Elastic rods and wires) (Mathematical physics)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120018-3"

VOYTSEKHOVSKAYA, K.F. [Voitsekhivs'ka, K.F.] (Kiyev)

Elastic plastic problem for an eccentric cylindrical pipe subjected to the action of uniformly distributed pressure. Prykl. mekh. 4 no.3:294-301 '58. (MIRA 13:8)

1. Institut matematiki AN USSR.
(Pipe) (Strains and stresses)

KASHCHEYEV, V.N.; VOYTSEKHOVSKAYA, L.N.

Abrasion wear of aluminum-magnesium alloys at various temperatures. Izv. vys. ucheb. zav.; fiz. no.1:57-62 '59. (MIRA 12:8)

1.Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva.
(Aluminum-magnesium alloys--Testing)

24(6), 18(7) SOV/139-59-1-9/34

AUTHORS: Kashcheyev V.N. and Voytsekhovskaya L.N.

TITLE: Abrasive Wear of Aluminium-Magnesium Alloys at Various Temperatures (Abrazivnyy iznos splavov alyuminiy-magniy pri razlichnykh temperaturakh)

PERIODICAL: Izvestiya Vysshikh Uchebnykh Zavedeniy, Fizika, 1959, Nr 1, pp 57-62 (USSR)

ABSTRACT: The abrasive wear and "hot" hardness of alloys of aluminium and magnesium of various concentrations has been investigated at various temperatures. Specimens, cast into a chill mould and subsequently annealed, were studied. They had the following concentrations: 0, 1, 4, 8, 16 and 20% by weight of technically pure magnesium, the remainder being technically pure aluminium. The following temperatures were selected for testing: 20, 100, 200, 300 and 400 °C. The face of a cylindrical specimen of 5 mm diameter, gripped in tongs, was rubbed against the flat surface of a slowly revolving electro-corundum disc of medium hardness and grain size, bonded with a ceramic material. The apparatus, described by Kiselev (Ref 7), enabled wear against a continuously changing portion of the disc, i.e. along a spiral path. The wearing specimen

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Abrasive Wear of Aluminium-Magnesium Alloys at Various Temperatures

and the abrasive disc were situated inside an electric furnace. The temperature was measured by means of a thermocouple, the hot junction of which was placed close to the wearing specimen. The normal load on the specimen was always constant (3 kg). The amount of wear was estimated by weighing the specimens before and after the experiment with an accuracy of up to 0.1 mg. In Fig 1 the dependence of the total wear of alloys on their concentration at various temperatures is shown. In Fig 2 the dependence of total wear of the same alloys on the temperature of testing is shown. Fig 3 accommodates the left hand corner of the aluminium-magnesium equilibrium diagram, together with wear resistance curves for the alloys under investigation. The reciprocal of the total wear is taken as wear resistance. In Fig 4 the relationship between rubbing force and temperature for alloys of the concentrations investigated is shown. The hot hardness, which was tested by the same equipment at the above indicated temperatures, was taken as a characteristic of the mechanical properties of the alloys. The hardness was calculated by the formula:

Abrasive Wear of Aluminium-Magnesium Alloys at Various Temperatures

$$H_K = \frac{P}{\frac{\pi d^2}{4}}$$

where P is the load in kg, d is the diameter of impression in mm. In Figs 5 and 6, the relationships between hot hardness and concentration of the alloys at various temperatures, and hot hardness and testing temperature for various concentrations, are shown. The wear by firmly gripped abrasive grains leads to local destruction of the metal by scratching. An effort has been made to find a relationship between the volume of metal removed from the surface and the extent of plastic deformation brought about by scratching, which is expressed by the so-called "piling-up" of metal. Specimens containing 0.8 and 16% Mg, were scratched at a load of 0.750 kg. Scratching was carried out at 20, 200 and 400°C at very low speed. In Fig 7, a typical cross-section of the metal surface, perpendicular to the scratch, is shown. If S_1 is the cross-sectional area of removed metal, and S_2 the cross-sectional area of piled-up metal, then

$$\eta = \frac{S_1}{S_1 - S_2}$$

will tend to unity when S_2 tends to zero. The more plastic the metal, the greater will be η. In Table 1 the test results are shown. As the temperature is raised, so η tends to increase. It appears that η is characteristic of the brittleness and plasticity of scratched metal. As a result of the above investigations the authors have arrived at the following conclusions:
(1) The abrasive wear of alloys at low temperatures is the lower, the greater the magnesium content of the alloy and the greater the static distortions at a constant bond force. This does not apply for high temperatures, as the melting point of the alloy and the degree to which it softens begin to exert a decisive influence.
(2) Between the wear resistance and hot hardness of the investigated alloys there is only a qualitative relationship, and that only at low temperatures of testing: the greater the hardness the greater the resistance to wear.
(3) The concentration of saturation of the solid solution

Abrasive Wear of Aluminium-Magnesium Alloys at Various Temperatures

by magnesium at various temperatures of testing does not exert any influence on the wear resistance curves of the alloys.
(4) The friction force does not to any extent characterise the resistance of alloys to abrasive wear.
There are 7 figures, 1 table and 7 Soviet references.

ASSOCIATION: Sibirskiy Fiziko-tekhnicheskiy institut pri Tomskom Gosuniversitete imeni V.V. Kuybysheva (Siberian Physico-Technical Institute at Tomsk State University, imeni V.V. Kuybyshev)

SUBMITTED: July 4, 1958

S/081/62/000/009/042/075
B166/B144

AUTHORS: Matsaberidze, T. G., Voytsekhovskaya, N. F.

TITLE: Contribution to the problem of developing a flow sheet for extracting boric acid from datolites using organic bases and ion-exchange resins. Communication I. Optimum conditions for decomposition of the datolites; study in the field of coagulation of silicic acid

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, 382, abstract 9K43 (Tr. Kavkazsk. in-ta mineral'n. syr'ya, no. 1 (3), 1960, 141-148)

TEXT: Optimum conditions for the decomposition of datolite concentrate were found to be H_2SO_4 amounting to 60% of the stoichiometric norm related to the CaO contained in the ore or concentrate; process temperature 60°C; stirring time 30 min; initial liquid/solid ratio = 4 : 1. Consumption coefficients are calculated. Producing 1 ton of boric acid requires 11.66 tons of concentrate with a B_2O_3 content of 4.91% and 2.83 tons of

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Contribution to the problem ...

H_2SO_4. It is shown possible to use organic bases (pyridine) which enable colloidal SiO_2 to be removed by aluminum hydroxide from the solutions obtained after decomposition of the datolite concentrate. With decreasing liquid/solid ratio, the amount of silicic acid obtained by using aluminum hydroxide increases. The maximum increase takes place at a liquid/solid ratio of 3 : 1; with this ratio ~92.2% of the silicic acid is removed from solution. [Abstracter's note: Complete translation.]

Card 2/2

SHIMKO, I.G.; KUVIN, A.A.; VOYTSEKHOVSKAYA, Ye.S.; TATEVOSYAN, Ye.L.; MAKAROVA, T.P.; GAYDUKOV, K.A.; GINZBERG, M.A.; Prinimali uchastiye: POLYAKOVA, G.V.; BEZVERSHENKO, V.I.

Introducing continuous mercerization systems in the manufacture of viscose rayon. Khim. volok. no.3:61-65 '63. (MIRA 16:7)

1. Kiyevskiy kombinat (for Shimko, Kuvin, Voytsekhovskaya). 2. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Tatevosyan, Makarova). 3. Kiyevskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Gaydukov, Polyakova, Bezvershenko). 4. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Ginzberg).
(Rayon) (Mercerization)

VOITSEKHOVSKII DOMANSKII

POLAND/Soil Science. Mineral Fertilizers. I-5

Abs Jour: Referat Zh-Biol., No 6, 25 March, 1957, 22493

Author : Voitsekhovskii, Domanskii
Inst :
Title : The Effect of Nitrogen Feedings onDiminishing the Deleterious Effect of Drought on Summer Barley.

Orig Pub: Prace Komis. nauk. roln. i lesn. Poznanskie towarz przyjasiul nauk. Wydz. mat. - przyrodn. 1956, 3, No 2, 28 p, ill.

Abstract: A study was conducted on the effect of nitrogen feeding and lowering soil moisture to 25 or 20% of full moisture capacity in the bushing, emergence into tubes, and earing phases for 2 years in vegetative experiments with barley on podzol soils. The best effect was obtained by feeding during the bushing period. The most marked crop loss was caused by drought in the tube emergence period. When N was introduced in the bushing period, drought in this or in subsequent phases somewhat lowered the grain crop, but the total content of protein of the crop was

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Abs Jour: Referat Zh-Biol., No 6, 25 March, 1957, 22493

even increased. A simultaneous addition of N and lowering of soil moisture in the tubulation phase led to a further crop diminution, evidently due to a decreased quantity of water available to the plants. In this variant, the total number of grains was smaller and the percentage of unfilled grains was higher. Plants affected by drought or those which were fed had a much larger content of protein in the grain.

POPKOVA, L.M.; LEVIK, N.P.; VOYTSEKHOVSKIY, A.P.; REZNICHENKO, T.N.

First test of the use of chromates to increase the heat resistance of clay muds. Burenie no.4:12-14 '64. (MIRA 18:5)

1. Moskovskiy ordena Trudovogo Krasnogo Znameni institut neftekhimicheskoy i gazovoy promyshlennosti im. akad. Gubkina i Krasnodarskiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

VOYTSEKHOVSKIY, A. A., Cand Master Tech Sci — (diss) "Experimental investigation of slag concrete flooring and roofing panels." Chelyabinsk, 1957, 19 pp. (Acad of Constr & Architecture USSR. Sci-Res Inst of Concrete and Ferroconcrete), 150 copies. (KL, No 40, 1957, p.92)

VOYTSKHOVSKIY, A.A.

BERSHTEYN, D.O.; VOYTSKHOVSKIY, A.A.; ZABOROV, V.I.

Prestressed 3x12m panels to be used for roofs of industrial buildings. Stroi. prom. 35 no.12:35-37 D '57. (MIRA 11:1)

1. Ural'skiy filial Akademii stroitel'stva i arkhitektury SSSR.
(Roofs, Concrete)

L 21522-66 EWT(m)/EWP(j)/T/ETC(m)-6 WW/JW/JG

ACC NR: AP6009899 SOURCE CODE: UR/0413/66/000/004/0091/0091

INVENTOR: Babkin, M. I.; Bivin, Yu. K.; Voytsekhovskiy, A. I.; Alekseyev, L. I.; Sukhoruchenko, V. A.

55
B

ORG: none

TITLE: Device for generating pressure pulses in a liquid. [9] Class 42, No. 179050

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 91

TOPIC TAGS: hydraulics, hydraulic control, hydraulic control system, pulse generator

ABSTRACT: The proposed device contains a working chamber connected to a hydraulic cylinder with a piston which senses the kinetic energy of the feed load by means of a gage. To generate various-shaped pressure pulses and to regulate the moment of initiation and the rate of pressure drop in the working chamber, the piston is made in the form of a glass which is covered on the bottom by a diaphragm which ruptures at a given pressure. The glass has a longitudinal slit and radial openings which connect the internal piston cavity at a certain position in respect to a cylinder with an

Card 1/2 UDC: 621.227.3:620.1.05

L 21522-66

ACC NR: AP6009899

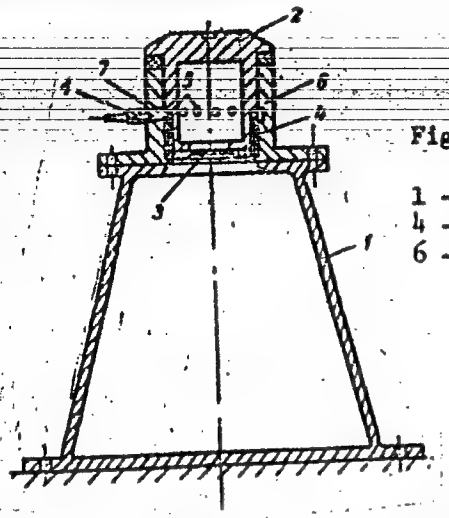

Fig. 1. Liquid pulse generator

1 - Working chamber; 2 - piston; 3 - diaphragm; 4 - longitudinal slot; 5 - radial openings; 6 - cylinder; 7 - annular groove; 8 - throttle.

annular groove on the internal surface of the latter. The groove is connected through a throttle to the overflow duct (see Fig. 1). Orig. art. has: 1 figure. [TN]

SUB CODE: 21/ SUBM DATE: 26Jan65/ ATD PRESS: 4222

Card 2/2 ddw

VOYTSEKHOVSKIY, A.V. [Voitsekhivs'kyi, O.V.]; KESAMANLY, F.P.; MITYUREV, V.K. [Mitiur'ov, V.K.]; RUD', Yu.V.

Transfer effects in the alloys InAs-CdTe and InAs-ZnTe. Ukr.fiz.zhur.10 no.12:1349-1353 D '65. (MIRA 19:1)

1. Kiyevskiy pedagogicheskiy institut im. Gor'kogo.
Submitted December 15, 1964.

VOYTSEKHOVSKIY, A.V. [Voitsekhivs'kyi, O.V.]

Thermal conductivity of certain four-component semiconductor alloys. Ukr. fiz. zhur. 8 no.9:1027-1028 S '63. (MIRA 17:8)

1. Kiyevskiy pedagogicheskiy institut im. Gor'kogo.

GORYUNOVA, N.A.; VOYTSEKHOVSKIY, A.V.; PROCHUKHAN, V.D.

Possibility of forming solid solutions in some four-component systems. Vest.LGU 16 no.10:156-158 '61. (MIRA 14:5)
(Solutions, Solid)

VOYTSEKHOVSKIY, A.V. [Voitsekhivs'kyi, O.V.]

Some four-component semiconductor phases. Ukr. fiz. zhur. 9 no.7: 796-797 Jl '64. (MIRA 17:10)

1. Kiyevskiy pedagogicheskiy institut im. Gor'kogo.

VOYTSEKHOVSKIY, B.T. (Moskva)

Review evening on physics. Fiz. v shkole 21 no.2:95 Mr-Ap '61. (MIRA 14:8)

(Physics--Study and teaching)

BORODIN, V.P., (Novosibirsk); VOYTSEKHOVSKIY, B.V. (Novosibirsk); MIKHAYLOV, V.V. (Novosibirsk)

Use of the tensometric method in measuring high-speed high-pressure pulsewise jets. PMTF no. 6:104-108 N-D '63. (MIRA 17:7)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001861120018-3"

AUTHOR: Voytsekhovskiy, B. V. 20-114-4-11/63

TITLE: On the Spinning Detonation (O spinovoy detonatsii)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 4, pp. 717-720 (USSR)

ABSTRACT: In the here-performed approximate calculation the following is assumed: The Jouget condition applies to the spinning denotation wave as a whole, as well as to the secondary detonation wave which moves in the compressed gas II in a transverse direction. The gas before and behind the shock wave is here denoted by I and II, respectively. The flow round a triple point A reduces itself to a plane problem. A diagram illustrates the two possible cases of circulation round the reaction products of the reaction of the second detonation wave by gas I. The front of the shock wave AB is here assumed to be vertical to the generatrix of the detonation tube. The angle of rotation of the flow cannot exceed a certain critical value, if the transition line is oblique. If the critical value is exceeded, an eddy may form in the vicinity of point A. In most gas mixtures the angle of rotation has to be somewhat greater than the critical value. With the use of the here-discussed physi-

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cal conceptions it is not hard to calculate the spacing of the spinning detonation. Terms are then given for the velocity of flow and for the relation of densities. In the present work the photo-recording of the detonation $2CO + O_2$ is performed through a crack of a tube containing this mixture. The method of producing these photographs is shortly described. Within the secondary detonation wave there moves a luminous projection the magnitude of which varies in different quantities. This projection means sudden modification of pressure. In some cases the magnitude of the projection sharply decreases. Finally some essential differences between the here-obtained results and the results of some preliminary papers are pointed out. There are 3 figures and 7 references, 6 of which are Slavic.

On the Spinning Detonation

20-114-4-11/63

ASSOCIATION: Moscow Physical Technical Institute (Moskovskiy fiziko-tekhnicheskiy institut)

PRESENTED: February 13, 1957 by M.A. Lavrent'yev, Member of the Academy

SUBMITTED: February 12, 1957

Card 3/3

VOYTSEKHOVSKIY, B. V., (Cand. Tech. Sci.)

"Investigating the Nature of the Wave Front of Spin Detonation," Research in Physics and Radio Engineering, Moscow, Oborongiz, 1958. p 81.

The book is a collection of 13 articles written by instructors and graduate and undergraduate students of the Moscow Inst. of Physics and Technology. The articles discuss problems in radiophysics, optics and physics.

VOYTSEKHOVSKIY, B.V., kand.tekhn.nauk

Investigation of the front structure of spin detonations. Trudy MFTI no.2:81-91 '58. (MIRA 11:12)
(Explosions)